

**To:** Seyfried, Erin[Seyfried.Erin@epa.gov]; Heather.Ptak@shell.com[Heather.Ptak@shell.com]  
**Cc:** Cool, Richard[Cool.Richard@epa.gov]; Shaw, Hanh[Shaw.Hanh@epa.gov];  
 Greg.Horner@shell.com[Greg.Horner@shell.com]  
**From:** Lana.Davis@shell.com  
**Sent:** Thur 6/4/2015 5:00:58 PM  
**Subject:** RE: NPDES Exploration GP - Shells permitted outfalls

Hi Erin and Rick,

Below are the response to your questions around the number of outfalls per rig. Let me know if you have any more questions.

Regards,

Lana

Discoverer:

Discharge	Noble Discoverer	
	Number of Outfalls (Erin)*	NPDES MasterSheet (emailed to Rick)
D001 – Drilling Fluids and Drill Cuttings	1	1
D002 – Deck Drainage <sup>1</sup>	3	4
D003 – Sanitary Waste	1	1
D004 – Domestic Waste	1	1
D005 – Desalination Unit Waste <sup>2</sup>	4	2
D006 – BOP	1	1
D007 – Boiler Blowdown	1	1
D008 – Fire Control System Test Water	1	1
D009 – Non-Contact Cooling Water <sup>3</sup>	6	10
D010 – Uncontaminated Ballast Water	1	1
D011 – Bilge Water	1	1
D012 – Excess Cement Slurry	1	1
D013 – Muds, Cuttings, Cement	1	1

D002 Deck Drainage, there are 3 outfall locations. One through the OWS, the MPC, and the deck drainage overboard bypass for emergency situations.

D005 Desal Unit Waste is comingled with non-contact cooling water and there are two outfall locations (one starboard and one port). Diagrams are correct.

D009 Non Contact Cooling water has 10 locations. There are 9 metered locations, as well as 1 location that is used for the main engine (but would only be used when we are a source in the case of mooring operations, and for limited periods of time- Only use the main engine while setting or lifting anchored.

Polar Pioneer:

<b>Polar Pioneer</b>		
Discharge	Number of Outfalls (Erin)*	Number of Outfalls (Rick)**
D001 – Drilling Fluids and Drill Cuttings	1	1
D002 – Deck Drainage	1	1
D003 – Sanitary Waste	1 <sup>1</sup>	1
D004 – Domestic Waste	1 <sup>1</sup>	1
D005 – Desalination Unit Waste	1 <sup>1</sup>	1
D006 - BOP	1	1
D007 – Boiler Blowdown	2	2
D008 – Fire Control System Test Water	1	1
D009 – Non-Contact Cooling Water	2 <sup>1,2</sup>	2
D010 – Uncontaminated Ballast Water	2 <sup>4</sup>	8
D011 – Bilge Water	1	1
D012 – Excess Cement Slurry	1	1

D013 – Muds, Cuttings, Cement	1	1
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The Port and Starboard Engineering diagrams label “Commingled 003-004” and “Commingled 005-009” discharge points.

On the port side of the vessel D003 and D004 are comingled in the single discharge line. Both effluents are tested prior to comingling.

In the air compressor/water maker room on the starboard machine deck D009 and D005 are comingled into the main D009 discharge line coming down the S4 column and discharged below the surface.

The D005 can be tested prior to comingling. The D009 will be tested comingled with D005. D009 is the most stringent discharge so the sample will be treated as D009.

2 Erin notes 2 outfalls – Starboard #4 column and Port #2 column

This is correct. There is only two outfalls for D009. There are more sample ports, but not outfalls. D009- only two outfalls, there is one on the port side and one on the starboard side. The two outfalls are the hard lines going down the S4 and P2 column.

3 Rick notes 4 outfalls – 2 related to rig brake operations in addition to the outfalls Erin identified. These are additional sample locations for a grab sampling. There is only two D009 outfalls.

4 The Appendix A engineering diagrams for the treatment system indicate 2 discharge points, however, the engineering diagrams for the Port and Starboard sides indicate 3 outfalls per pontoon (therefore 6 total) – which is it? The Ballast auto-cad diagrams 8 outfalls. There are 8 possible discharge points for the ballast water. The number of outfall points was verified with the Ballast Control Office and the chief mechanic.

**From:** Seyfried, Erin [mailto:Seyfried.Erin@epa.gov]  
**Sent:** Tuesday, June 02, 2015 10:16 AM  
**To:** Davis, Lana SEPCO-UAA/H/E; Ptak, Heather A SEPCO-UAA/H/E  
**Cc:** Cool, Richard; Shaw, Hanh  
**Subject:** NPDES Exploration GP - Shells permitted outfalls

Hi Lana and Heather –

I was about to work with someone to have coding sheets drafted up for your 2015 NOIs and after a conversation with Rick it seems there are a few discrepancies regarding the number of outfalls per discharge for each drill rig. For simplicity, I have included a table summarizing what I found in the NOI documents, what Rick found and what was provided in an "NPDES MasterSheet" for the Disco (sent to Rick by Lana).

Could you please confirm the number of outfalls per discharge for each rig? I also included footnotes to the tables so you knew where I was pulling my information from.

Thanks,

Erin

<b>Noble Discoverer</b>		
Discharge	Number of Outfalls (Erin)*	NPDES MasterSheet (emailed to Rick)
D001 – Drilling Fluids and Drill Cuttings	1	1
D002 – Deck Drainage <sup>1</sup>	3	1
D003 – Sanitary Waste	1	1
D004 – Domestic Waste	1	1
D005 – Desalination Unit Waste <sup>2</sup>	1	0
D006 – BOP	1	1
D007 – Boiler Blowdown	1	1
D008 – Fire Control System Test Water	1	1
D009 – Non-Contact Cooling Water <sup>3</sup>	6	7
D010 – Uncontaminated Ballast Water	1	1
D011 – Bilge Water	1	1
D012 – Excess Cement Slurry	1	1
D013 – Muds, Cuttings, Cement	1	1

\* Source: BMP Section 4 and Engineering Diagrams in BMP Appendix A

<sup>1</sup> BMP Appendix A, Starboard Engineering Diagram shows 3 deck drainage outfalls (one through an OWS, one through multi-phase clarifier and it is noted that the Disco has the ability to process all deck drainage through the MPC)

<sup>2</sup> The Shell NPDES MasterSheet indicates 1 commingled discharge with desal (Note Permit Part II.A.10). However, BMP Section 4 indicates two outfall locations (one Port and one Starboard) and the engineering diagram for desal and evaporator system shows 1 discharge.

<sup>3</sup> The Shell NPDES MasterSheet indicates 7 outfalls, though one is commingled with Desal (Note Permit Part II.A.10). However, BMP Section 4 and Appendix A indicate 6 outfalls.

<b>Polar Pioneer</b>		
Discharge	Number of Outfalls (Erin)*	Number of Outfalls (Rick)**
D001 – Drilling Fluids and Drill Cuttings	1	1
D002 – Deck Drainage	1	1
D003 – Sanitary Waste	1 <sup>1</sup>	1
D004 – Domestic Waste	1 <sup>1</sup>	1
D005 – Desalination Unit Waste	1 <sup>1</sup>	1
D006 - BOP	1	1
D007 – Boiler Blowdown	2	2
D008 – Fire Control System Test Water	1	1
D009 – Non-Contact Cooling Water	2 <sup>1, 2</sup>	4 <sup>3</sup>
D010 – Uncontaminated Ballast Water	2 <sup>4</sup>	6
D011 – Bilge Water	1	1
D012 – Excess Cement Slurry	1	1
D013 – Muds, Cuttings, Cement	1	1

\* Source: BMP Section 4 and Appendix A

\*\* Source: BMP and QAP

<sup>1</sup> The Port and Starboard Engineering diagrams label “Commingled 003-004” and “Commingled 005-009” discharge points.

<sup>2</sup> Erin notes 2 outfalls – Starboard #4 column and Port #2 column

<sup>3</sup> Rick notes 4 outfalls – 2 related to rig brake operations in addition to the outfalls Erin identified.

<sup>4</sup> The Appendix A engineering diagrams for the treatment system indicate 2 discharge points, however, the engineering diagrams for the Port and Starboard sides indicate 3 outfalls per pontoon (therefore 6 total) – which is it?

